

IPW



PATENT  
Customer No. 22,852  
Attorney Docket No. 05725.1602-00000

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: )  
Timo LUUKAS )  
Application No.: 10/593,970 ) Group Art Unit: 1615  
Filed: September 22, 2006 ) Examiner: Michael P. Woodward  
For: COMPOSITION COMPRISING A ) Confirmation No.: 4038  
MONOMER COMPOUND )  
EXHIBITING AN OPTICAL )  
PROPERTY, METHOD MAKING )  
USE OF SAID COMPOSITION, A )  
MONOMER COMPOUND AND A )  
POLYMER CONTAINING SAID )  
MONOMER COMPUND AND THE )  
USE THEREOF )

**REQUEST FOR CORRECTED PATENT APPLICATION PUBLICATION**  
**UNDER 37 C.F.R. § 1.221(b)**

The U.S. Patent and Trademark Office published the above-identified Application No. 10/593,970 as Publication No. US 2008/0226581 A1 on September 18, 2008. The published application contains a mistake that is the fault of the Office and may be material. Attached hereto is a copy of both the relevant page of the originally filed application and a marked-up copy of the corresponding page of the published application containing the mistakes.

A mistake is material when it affects the public's ability to appreciate the technical disclosure of the patent application publication or determine the scope of the provisional

rights that an applicant may seek to enforce upon issuance of a patent. See 37 C.F.R. § 1.221(b).

The mistake, which is indicated in red ink on the relevant page of the marked-up copy of the published application attached hereto, is as follows:

-- page 30, column 2, lines 10-44, should be moved and inserted at page 30, column 1, line 30, after the word "methoxypropyl,".

The mistake may affect the scope of the claims or the public's ability to determine the same.

For at least the foregoing reasons, Applicant requests that the Office correct the above-identified mistake in the published application, which is the fault of the Office. Further, Applicant requests that the Office forward to Applicant a copy of the corrected published application or at least a notification of the occurrence or predicted occurrence of the corrected publication once the mistake has been corrected.

Applicant believes that no Petition or fee is due in connection with this Request, however, if any Petition or fee is due, please grant the Petition and charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

By:

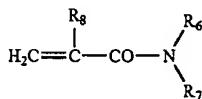
  
Aaron M. Raphael  
Reg. No. 47,885

Dated: November 17, 2008

is (are) optionally intercalated one or more heteroatoms chosen from O, N, S and P, said alkyl groups also possibly being optionally substituted with one or more substituents chosen from hydroxyl groups, halogen atoms (Cl, Br, I and F), and groups Si(R<sub>4</sub>R<sub>5</sub>), in which R<sub>4</sub> and R<sub>5</sub>, which may be identical or different, represent a C<sub>1</sub> to C<sub>6</sub> alkyl group or a phenyl group,

R'<sub>3</sub> may also be a group —(C<sub>2</sub>H<sub>4</sub>O)<sub>m</sub>—R'', with m=5 to 150 and R''=H or C<sub>1</sub> to C<sub>30</sub> alkyl, for example —POE-methyl or —POE-behenyl;

(iii) the (meth)acrylamides of formula:



in which R<sub>8</sub> denotes H or methyl; and R<sub>7</sub> and R<sub>6</sub>, which may be identical or different, represent:

a hydrogen atom; or

a linear or branched alkyl group of 1 to 18 carbon atoms, in which is (are) optionally intercalated one or more heteroatoms chosen from O, N, S and P; said alkyl group also possibly being optionally substituted with one or more substituents chosen from hydroxyl groups, halogen atoms (Cl, Br, I and F), and groups Si(R<sub>4</sub>R<sub>5</sub>), in which R<sub>4</sub> and R<sub>5</sub>, which may be identical or different, represent a C<sub>1</sub> to C<sub>6</sub> alkyl group or a phenyl group;

R<sub>6</sub> and/or R<sub>7</sub> may especially be a methyl, ethyl, propyl, n-butyl, isobutyl, tert-butyl, hexyl, ethylhexyl, octyl, lauryl, isoctyl, isodecyl, dodecyl, cyclohexyl, t-butylcyclohexyl or stearyl group; 2-ethylperfluorohexyl; or a C<sub>1</sub>-<sub>4</sub> hydroxyalkyl group such as 2-hydroxyethyl, 2-hydroxybutyl or 2-hydroxypropyl; or a (C<sub>1</sub>-<sub>4</sub>)alkoxy(C<sub>1</sub>-<sub>4</sub>)alkyl group such as methoxyethyl, ethoxyethyl or methoxypropyl, represent a C<sub>1</sub> to C<sub>6</sub> alkyl group or a phenyl group;

a C<sub>3</sub> to C<sub>12</sub> cycloalkyl group such as isobornyl or cyclohexane,

a C<sub>3</sub> to C<sub>20</sub> aryl group such as phenyl,

a C<sub>4</sub> to C<sub>30</sub> aralkyl group (C<sub>1</sub> to C<sub>8</sub> alkyl group) such as 2-phenylethyl; benzyl,

a 4- to 12-membered heterocyclic group containing one or more heteroatoms chosen from O, N and S, the ring being aromatic or non-aromatic,

a heterocycloalkyl group (1 to 4 C alkyl), such as furfurylmethyl or tetrahydrofurfurylmethyl,

said cycloalkyl, aryl, aralkyl, heterocyclic or heterocycloalkyl groups possibly being optionally substituted with one or more substituents chosen from hydroxyl groups, halogen atoms and linear or branched 1 to 4 C alkyl groups in which is (are) optionally intercalated one or more heteroatoms chosen from O, N, S and P, said alkyl groups also possibly being optionally substituted with one or more substituents chosen from hydroxyl groups, halogen atoms (Cl, Br, I and F) and groups Si(R<sub>4</sub>R<sub>5</sub>) in which R<sub>1</sub> and R<sub>2</sub>, which may be identical or different, represent a C<sub>1</sub> to C<sub>6</sub> alkyl group, or a phenyl group;

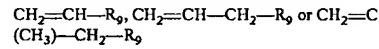
(v) (meth)acrylic, (meth)acrylamide or vinyl monomers containing a fluoro or perfluoro group, such as ethylperfluoroctyl or 2-ethylperfluorohexyl (meth)acrylate;

(vi) silicone-based (meth)acrylic, (meth)acrylamide or vinyl monomers, such as methacryloxypropyltris(trimethylsiloxy)silane or acryloxypropylpolydimethylsiloxane;

(vii) ethylenically unsaturated monomers comprising at least one carboxylic, phosphoric or sulfonic acid, or anhydride, function, for instance acrylic acid, methacrylic acid, crotonic acid, maleic anhydride, itaconic acid, fumaric acid, maleic acid, a C<sub>3</sub> to C<sub>12</sub> cycloalkyl group, such as an isobornyl group, a C<sub>3</sub> to C<sub>20</sub> aryl group such as a phenyl group, a C<sub>4</sub> to C<sub>30</sub> aralkyl group (C<sub>1</sub> to C<sub>8</sub> alkyl group) such as 2-phenylethyl, t-butylbenzyl or benzyl, a 4- to 12-membered heterocyclic group containing one or more heteroatoms chosen from O, N and S, the ring being aromatic or non-aromatic, a heterocycloalkyl group (1 to 4 C alkyl), such as furfurylmethyl or tetrahydrofurfurylmethyl,

said cycloalkyl, aryl, aralkyl, heterocyclic or heterocycloalkyl groups possibly being optionally substituted with one or more substituents chosen from hydroxyl groups, halogen atoms and linear or branched C<sub>1</sub>-C<sub>4</sub> alkyl groups in which is (are) optionally intercalated one or more heteroatoms chosen from O, N, S and P, said alkyl groups also possibly being optionally substituted with one or more substituents chosen from hydroxyl groups, halogen atoms (Cl, Br, I and F) and groups Si(R<sub>4</sub>R<sub>5</sub>), in which R<sub>4</sub> and R<sub>5</sub>, which may be identical or different, represent a C<sub>1</sub> to C<sub>6</sub> alkyl group, or a phenyl group;

(iv) the vinyl compounds of formulae:



in which R<sub>9</sub> is a hydroxyl group, halogen (Cl or F), NH<sub>2</sub>, OR<sub>10</sub> in which R<sub>10</sub> represents a phenyl group or a C<sub>1</sub> to C<sub>12</sub> alkyl group (the monomer is a vinyl or allylic ether); acetamide(NHCOCH<sub>3</sub>); a group OCOR<sub>11</sub> in which R<sub>11</sub> represents a linear or branched alkyl group of 2 to 12 carbons (the monomer is a vinyl or allylic ester); or a group chosen from:

a linear or branched alkyl group of 1 to 18 carbon atoms, in which is (are) optionally intercalated one or more heteroatoms chosen from O, N, S and P; said alkyl group also possibly being optionally substituted with one or more substituents chosen from hydroxyl groups, halogen atoms (Cl, Br, I and F) and groups Si(R<sub>4</sub>R<sub>5</sub>), in which R<sub>4</sub> and R<sub>5</sub>, which may be identical or different, represent a C<sub>1</sub> to C<sub>6</sub> alkyl group, or a phenyl group; acrylamidopropanesulfonic acid, vinylbenzoic acid and vinylphosphoric acid, and the salts thereof;

(viii) ethylenically unsaturated monomers comprising at least one tertiary amine function, for instance 2-vinylpyridine, 4-vinylpyridine, dimethylaminoethyl methacrylate, diethylaminoethyl methacrylate or dimethylaminoethylmethacrylamide, and the salts thereof.

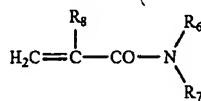
54. The polymer as claimed in claim 53, characterized in that the additional comonomer(s) is (are) present in an amount of from 30% to 99.99% by weight, especially in an amount of from 50% to 99.9% by weight, in particular from 70% to 99.5% by weight or even from 80% to 99% by weight and better still from 90% to 98% by weight relative to the weight of the final polymer.

55. The polymer as claimed in one of claims 47 to 54, characterized in that the additional comonomers are chosen, alone or as a mixture, from C<sub>1</sub>-C<sub>18</sub> alkyl or C<sub>3</sub>-C<sub>12</sub> cycloalkyl (meth)acrylates, and especially from methyl acrylate, methyl methacrylate, isobornyl acrylate, isobornyl methacrylate,

is (are) optionally intercalated one or more heteroatoms chosen from O, N, S and P, said alkyl groups also possibly being optionally substituted with one or more substituents chosen from hydroxyl groups, halogen atoms (Cl, Br, I and F), and groups Si(R<sub>4</sub>R<sub>5</sub>), in which R<sub>4</sub> and R<sub>5</sub>, which may be identical or different, represent a C<sub>1</sub> to C<sub>6</sub> alkyl group or a phenyl group,

R'<sub>3</sub> may also be a group —(C<sub>2</sub>H<sub>4</sub>O)<sub>m</sub>—R'', with m=5 to 150 and R''=H or C<sub>1</sub> to C<sub>30</sub> alkyl, for example —POE-methyl or —POE-behenyl;

(iii) the (meth)acrylamides of formula:



in which R<sub>8</sub> denotes H or methyl; and R<sub>7</sub> and R<sub>6</sub>, which may be identical or different, represent:

a hydrogen atom; or

a linear or branched alkyl group of 1 to 18 carbon atoms, in which is (are) optionally intercalated one or more heteroatoms chosen from O, N, S and P; said alkyl group also possibly being optionally substituted with one or more substituents chosen from hydroxyl groups, halogen atoms (Cl, Br, I and F), and groups Si(R<sub>4</sub>R<sub>5</sub>), in which R<sub>4</sub> and R<sub>5</sub>, which may be identical or different, represent a C<sub>1</sub> to C<sub>6</sub> alkyl group or a phenyl group;

R<sub>6</sub> and/or R<sub>7</sub> may especially be a methyl, ethyl, propyl, n-butyl, isobutyl, tert-butyl, hexyl, ethylhexyl, octyl, lauryl, isoctyl, isodecyl, dodecyl, cyclohexyl, t-butylcyclohexyl or stearyl group; 2-ethylperfluorohexyl; or a C<sub>1</sub>-C<sub>4</sub> hydroxyalkyl group such as 2-hydroxyethyl, 2-hydroxybutyl or 2-hydroxypropyl; or a (C<sub>1</sub>-C<sub>4</sub>)alkoxy(C<sub>1</sub>-C<sub>4</sub>)alkyl group such as methoxyethyl, ethoxyethyl or methoxypropyl, represent a C<sub>1</sub> to C<sub>6</sub> alkyl group or a phenyl group;

a C<sub>3</sub> to C<sub>12</sub> cycloalkyl group such as isobornyl or cyclohexane,  
a C<sub>3</sub> to C<sub>20</sub> aryl group such as phenyl,  
a C<sub>4</sub> to C<sub>30</sub> aralkyl group (C<sub>1</sub> to C<sub>8</sub> alkyl group) such as 2-phenylethyl; benzyl,  
a 4- to 12-membered heterocyclic group containing one or more heteroatoms chosen from O, N and S, the ring being aromatic or non-aromatic,  
a heterocycloalkyl group (1 to 4 C alkyl), such as furfurylmethyl or tetrahydrofurfurylmethyl,

said cycloalkyl, aryl, aralkyl, heterocyclic or heterocycloalkyl groups possibly being optionally substituted with one or more substituents chosen from hydroxyl groups, halogen atoms and linear or branched 1 to 4 C alkyl groups in which is (are) optionally intercalated one or more heteroatoms chosen from O, N, S and P, said alkyl groups also possibly being optionally substituted with one or more substituents chosen from hydroxyl groups, halogen atoms (Cl, Br, I and F) and groups Si(R<sub>4</sub>R<sub>5</sub>) in which R<sub>1</sub> and R<sub>2</sub>, which may be identical or different, represent a C<sub>1</sub> to C<sub>6</sub> alkyl group, or a phenyl group;

(v) (meth)acrylic, (meth)acrylamide or vinyl monomers containing a fluoro or perfluoro group, such as ethylperfluoroctyl or 2-ethylperfluorohexyl (meth)acrylate;

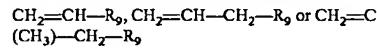
(vi) silicone-based (meth)acrylic, (meth)acrylamide or vinyl monomers, such as methacryloxypropyltris(trimethylsiloxy)silane or acryloxypropylpolydimethylsiloxane;

(vii) ethylenically unsaturated monomers comprising at least one carboxylic, phosphoric or sulfonic acid, or anhydride, function, for instance acrylic acid, methacrylic acid, crotonic acid, maleic anhydride, itaconic acid, fumaric acid, maleic acid,

[2] C<sub>3</sub> to C<sub>12</sub> cycloalkyl group, such as an isobornyl group, a C<sub>3</sub> to C<sub>20</sub> aryl group such as a phenyl group, a C<sub>4</sub> to C<sub>30</sub> aralkyl group (C<sub>1</sub> to C<sub>8</sub> alkyl group) such as 2-phenylethyl, t-butylbenzyl or benzyl, a 4- to 12-membered heterocyclic group containing one or more heteroatoms chosen from O, N and S, the ring being aromatic or non-aromatic, a heterocycloalkyl group (1 to 4 C alkyl), such as furfurylmethyl or tetrahydrofurfurylmethyl,

said cycloalkyl, aryl, aralkyl, heterocyclic or heterocycloalkyl groups possibly being optionally substituted with one or more substituents chosen from hydroxyl groups, halogen atoms and linear or branched C<sub>1</sub>-C<sub>4</sub> alkyl groups in which is (are) optionally intercalated one or more heteroatoms chosen from O, N, S and P, said alkyl groups also possibly being optionally substituted with one or more substituents chosen from hydroxyl groups, halogen atoms (Cl, Br, I and F) and groups Si(R<sub>4</sub>R<sub>5</sub>), in which R<sub>4</sub> and R<sub>5</sub>, which may be identical or different, represent a C<sub>1</sub> to C<sub>6</sub> alkyl group, or a phenyl group;

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a linear or branched alkyl group of 1 to 18 carbon atoms, in which is (are) optionally intercalated one or more heteroatoms chosen from O, N, S and P; said alkyl group also possibly being optionally substituted with one or more substituents chosen from hydroxyl groups, halogen atoms (Cl, Br, I and F) and groups Si(R<sub>4</sub>R<sub>5</sub>), in which R<sub>4</sub> and R<sub>5</sub>, which may be identical or different, represent a C<sub>1</sub> to C<sub>6</sub> alkyl group, or a phenyl group; acrylamidopropanesulfonic acid, vinylbenzoic acid and vinylphosphoric acid, and the salts thereof;

(viii) ethylenically unsaturated monomers comprising at least one tertiary amine function, for instance 2-vinylpyridine, 4-vinylpyridine, dimethylaminooethyl methacrylate, diethylaminooethyl methacrylate or dimethylaminopropylmethacrylamide, and the salts thereof.

54. The polymer as claimed in claim 53, characterized in that the additional comonomer(s) is (are) present in an amount of from 30% to 99.99% by weight, especially in an amount of from 50% to 99.9% by weight, in particular from 70% to 99.5% by weight or even from 80% to 99% by weight and better still from 90% to 98% by weight relative to the weight of the final polymer.

55. The polymer as claimed in one of claims 47 to 54, characterized in that the additional comonomers are chosen, alone or as a mixture, from C<sub>1</sub>-C<sub>18</sub> alkyl or C<sub>3</sub>-C<sub>12</sub> cycloalkyl (meth)acrylates, and especially from methyl acrylate, methyl methacrylate, isobornyl acrylate, isobornyl methacrylate,

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